

REMARKS

Claims 1 – 13, 17 – 43, 46, 47, 50, 51, 53, 54, 57, 58, 60 and 61 are now pending in the application, the remaining claims having been cancelled. Minor amendments have been made to certain of the claims to simply overcome the objections to the claims due to informalities and are not narrowing amendments. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

CLAIM OBJECTIONS

The Examiner objected to claims 2, 12, 25, 32 due to inconsistencies in the use of the term “motor control switch” and the term “On/Off switch.” Applicant has amended the claims to replace the term “motor control switch” with “On/Off switch” and submit that as amended, the informalities have been addressed.

REJECTION UNDER 35 U.S.C. § 112

The Examiner rejected claims 6, 11, 18, 23, 28, 29, 31 and 38 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicant regards as the invention. More specifically, the Examiner takes the position that the term “hum” is a relative term which renders the claim indefinite as it is not adequately defined in the specification. Applicant respectfully traverses this rejection.

Applicant submits that the term “hum” as used in the application and claims is a term of art well understood by those of skill in the art of electric motors. “Hum” occurs

when power is applied to the motor at a level sufficient to cause the motor to vibrate at a level that is noticeable to a user, typically producing an audible sound, but not at a level sufficient to cause the motor to rotate. The specification makes this clear in Paragraph 28 where it states that the motor hum alerts the user that the motor control switch 22 must be cycled to achieve normal operation of motor 18.

DOUBLE PATENTING REJECTION

The Examiner provisionally rejected claims 64 – 66 and 69 under the judicially created doctrine of obviousness-type double patenting over claims 42 – 48 and 51 of USSN 10/360,957. Applicant has cancelled claims 64 – 66 and 69.

REJECTION UNDER 35 U.S.C. § 102

The Examiner rejected 1, 3, 5, 13, 14, 16, 17, 50, 57 and 64 under 35 U.S.C. § 102(b) as being anticipated by Barthel et al. (U.S. Pat. No. 4,666,040). Claims 1, 13, 50, and 57 are the independent claims. Applicant has amended these claims and submits that as amended, these claims are allowable.

Turning first to independent claim 13, applicant has amended it to incorporate the limitations 14 and 15. As the Examiner indicated that claim 15 would be allowable if amended to incorporate the limitations of its base claim (claim 13) and any intervening claim(s) (claim 14), applicant submits that amended claim 13 is allowable.

Turning to independent claim 50, applicant has amended independent claim 50 to incorporate the limitations of claim 52 which depended directly from independent claim 50. As the Examiner indicated that claim 52 would be allowable if amended to

incorporate the limitations of its base claim (claim 50) and any intervening claims (none), applicant submits that amended claim 50 is allowable. Similarly, Applicant has amended independent claim 57 to incorporate the limitations of claim 59 which depended directly from independent claim 57. As the Examiner indicated that claim 59 would be allowable if amended to incorporate the limitations of its base claim (claim 57) and any intervening claims (none), applicant submits that amended claim 57 is thus allowable.

Turning to independent claim 1, it is directed to method for preventing startup of a motor when a device having the motor is initially electrically connected to a power source with an On/Off switch in the 'On' position. Applicant has amended claim 1 so that it now requires, *inter alia*, applying power to a controller when the device is initially electrically connected to the power source and utilizing the controller to fire an electronic switch to couple the motor to one side of the power source at a level insufficient for the motor to rotate, determining with the controller whether the On/Off switch is in the 'On' position while the controller is firing the electronic switch to couple the motor to one side of the power source at the level insufficient for the motor to rotate, and utilizing the controller to disable normal operation of the motor when the controller determines that the On/Off switch is in the 'On' position while the controller is firing the electronic switch to couple the motor to one side of the power source at the level insufficient for the motor to rotate. Applicant submits that Barthel et al. does not disclose or suggest a method having such limitations.

Barthel et al. is directed to a safety device that prevents an electric appliance from being inadvertently started if the appliance is plugged into an outlet when the on/off

switch of the appliance is in its on state. A low level sensing current is applied to the appliance before full operating power is applied. If the low level sensing current is detected by load sensor 20, relay coil 56 is not energized and normally open relay contacts 58 remain open. But Barthel et al. does not disclose firing an electronic switch to couple the motor to one side of the power source when the device having the motor is initially electrically connected to the power source at a level insufficient for the motor to rotate. Rather, one side of Barthel et al's motor is connected to on/off switch 12 and the other side is connected to safety device 30, both to diac 62 through resistor 60 and to one side of relay contacts 58. But relay contacts 58 are not opened and closed to switch the motor to power at a level insufficient for the motor to rotate. Relay contacts 58 are either open to keep the motor off or closed to energize the motor for normal operation. Applicant submits that amended claim 1 is thus allowable over Barthel et al. Applicant further submits that none of the remaining references applied by the Examiner in the § 103(a) rejections discussed below disclose or suggest the above discussed limitations of amended claim 1.

Claims 3 and 5 depend directly or indirectly from claim 1 and are allowable for at least that reason.

Claim 17 depends from amended claim 13 and is allowable for at least that reason.

Applicant has cancelled claims 14, 16 and 64.

REJECTION UNDER 35 U.S.C. § 103

The Examiner rejected claims 2, 21, 25, 40, 42, 43, 54, 61, 68 and 69 under 35 U.S.C. § 103(a) as being unpatentable over Barthel et al. and Shibuya et al. (JP 60174079 A). As applicant understands it, the Examiner also rejected claims 26, 34, 36, 37, 41 and 69 based on this combination. The Examiner rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Barthel et al. and Nakayama et al. (DE 1961851 A1). The Examiner rejected claims 6, 18, 51, 58, 65 and 66 under 35 U.S.C. § 103(a) as being unpatentable over Barthel et al. and Bradus (U.S. 4,628,233). The Examiner rejected claims 10 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Barthel et al. and Carrier (2002/0189831 A1). The Examiner rejected claims 11, 23, 55, 56, 62 and 67 under 35 U.S.C. § 103(a) as being unpatentable over Barthel et al., Carrier and Hopkins (US 5,254,916). The Examiner rejected claims 12 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Barthel et al., Carrier and Shibuya et al. The Examiner rejected claims 30 – 32, 39, 44, 48, 49 and 63 under 35 U.S.C. § 103(a) as being unpatentable over Barthel et al., Shibuya et al., Carrier and Hopkins. The Examiner rejected claim 33 under 35 U.S.C. 103(a) as being unpatentable over Barthel et al., Shibuya et al. and Nakayama et al. The Examiner rejected claim 35 under 35 U.S.C. § 103(a) as being unpatentable over Barthel et al., Shibuya et al., Carrier, Hopkins, Nakayama et al. and Boisvert et al. The Examiner rejected claim 38 under 35 U.S.C. § 103(a) as being unpatentable over Barthel et al. and Bradus.

Claims 2, 4 and 6 – 12 depend directly or indirectly from amended claim 1 and are allowable for at least that reason.

Claims 18 – 24 depend directly or indirectly from amended claim 13 and are allowable for at least that reason.

Claim 25 is an independent claim directed to a power tool. Applicant has amended claim 25 so that it now requires that a controller, upon the power tool being initially connected to an electrical power source, fires an electronic switch to couple power to the motor at a level insufficient for the motor to rotate, while firing the electronic switch to couple power to the motor at the level insufficient for the motor to function normally, senses whether the On/Off switch is in an 'On' position, and upon sensing that the On/Off switch is in the 'On' position, continues to disable normal operation of the motor while firing the electronic switch to couple power to the motor at the level insufficient for the motor to function normally. For much the same reasons discussed above with respect to amended claim 1, applicant submits that Barthel et al. fails to disclose or suggest these limitations. Similarly, Shibuya et al. fails to disclose or suggest these limitations. In Shibuya et al., the switching device 8 is simply kept off if the power switch is on when power is supplied to the connected equipment. [Shibuya et al., Abstract] Applicant submits that amended claim 25 is thus allowable.

Claims 26 – 39 depend directly or indirectly from amended claim 25 and are allowable for at least that reason.

Independent claim 40 is directed to a method of preventing inadvertent startup of a motor of a power tool. Applicant has amended claim 40 to incorporate limitations similar to those discussed above with respect to amended claim 1 and 25, and submit that claim 40 is allowable for the same reasons as amended claim 1.

Claim 41 depends from amended claim 40, and is allowable for at least that reason.

Claim 42 is an independent claim directed to a method for preventing inadvertent startup of a motor. Applicant has amended independent claim 42 to incorporate the limitations of claim 45 which depended directly from independent claim 42. As the Examiner indicated that claim 45 would be allowable if rewritten into independent form incorporating the limitations of its base claim (claim 42) and any intervening claims (none), applicant submits that amended claim 42 is allowable.

Claims 43, 46 and 47 depend from amended claim 42, and are allowable for at least that reason.

Applicant has cancelled claims 44 and 45.

Claim 50 is an independent claim directed to a system for prevent inadvertent startup of a motor. Applicant has amended independent claim 50 to incorporate the limitations of claim 52 which depended directly from independent claim 50. As the Examiner indicated that claim 52 would be allowable if rewritten into independent form incorporating the limitations of its base claim (claim 50) and any intervening claims (none), applicant submits that amended independent claim 50 is allowable.

Claims 51 and 53 – 56 depend directly or indirectly from amended independent claim 50, and are allowable for at least that reason.

Applicant has cancelled claim 52.

Claims 58 and 60 – 63 depend directly or indirectly from amended independent claim 57 and are allowable for at least that reason.

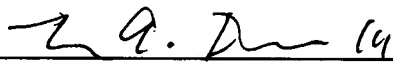
Applicant has cancelled claims 64 - 69.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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